



Application No. 10/627,387
Amendment dated January 10, 2005
Reply to Office Action of September 9, 2004

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listing, of claims in the application.

Listing of Claims:

Claim 1 (Currently Amended): A method for producing encapsulated particles to be added to food products, said method comprising:

forcing a first liquid through a first exit opening in an electrified first feeding needle to form a Taylor cone at the first exit whereby an extremely thin jet of the first liquid is emitted into a chamber having gas or vacuum;

forcing a second liquid, non-miscible with the first liquid, through a second exit in a second feeding needle, wherein the second ~~feed~~ feeding needle is concentrically located with respect to the first feeding needle, in a manner which causes the second liquid to form a conical meniscus which is anchored at the second exit of the second feeding needle and surrounds the Taylor cone of the first liquid;

wherein a jet of the second liquid, which is coaxial with, and surrounds, the extremely thin jet of the first liquid, is issued from the conical meniscus into the chamber;

wherein the second feeding needle ~~can be~~ is at the same or different electrical potential than the first feeding needle;

wherein the chamber contains a dielectric atmosphere;

wherein stable fluid interfaces are maintained between the second liquid and the gas or vacuum in the chamber and wherein the second and first liquids forced from the first and second feeding needles form, ~~when the coaxial jets break apart,~~ the encapsulated particles; and

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wherein the encapsulated particles comprise an inner core of the first liquid and an outer layer of the second liquid and wherein the encapsulated particles have an average diameter of about 100 microns to about 15 nanometers.

Claim 2 (Original): The method of claim 1, wherein the second liquid forms a Taylor cone and first liquid is driven by the second liquid.

Claim 3 (Currently Amended): The method of claim 1, wherein the first liquid is a food or food additive and the second liquid is a polymer material which encapsulates the food or food additive ~~when the coaxial jets break down~~.

Claim 4 (Currently Amended): The method of claim 2, wherein the first liquid is food or food additive and the second liquid is a polymer material which encapsulates the food or food additive ~~when the coaxial jets break down~~.

Claim 5 (Currently Amended): The method of claim 1, wherein the first liquid is a food or food additive with high nutritional value but offensive taste and the second liquid is a polymer which encapsulates the food or food additive ~~when the coaxial jets break down~~.

Claim 6 (Currently Amended): The method of claim 2, wherein the first liquid is food or food additive with high nutritional value but offensive taste and the second liquid is a polymer which encapsulates the food or food additive ~~when the coaxial jets break down~~.

Claims 7-14 (Cancelled).